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ABSTRACT

The correlation between risk taking behavior and test results on the Torrance Tests of Creative Thinking (TTCT) was examined in a group of 47 fourth and fifth grade students identified for a gifted and talented program. The risk-taking check list (DEEP) was developed by the Downington, Pennsylvania Area School District, and includes four creativity rating scales. Students' risk taking behavior was rated by classroom teachers. The other measure of creativity was based on the degree of discrepancy from expected item answering order on the TTCT, Figure A, Activity II, Product Completion. Discrepancy indicated an original or creative response to the test item. The comparison of the DEEP check list scores with the TTCT originality scores yielded a significant positive correlation. (GDC)

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Additional Scoring Possibilities For The Torrance Tests Of Creative Thinking

(Pilot Study)

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A concern of many educators has been the identification of students exhibiting creative ability. Creativity can be measured by four different types of instruments including rating scales, observation checklists, creativity tests, and bibliographical inventories (Heinemann, 1977, p. 19). Some of the most widely used checklists and rating scales include Mary Meeker's Rating Scale for Identifying Creative Potential (see References) and Joseph S. Renzulli's Scale for Rating the Behavioral Characteristics of Superior Students (Barbe, 1975, p. 266-270). Some school districts have also devised their own rating scales.

A more direct approach to the identification of the creativity of gifted students has been the use of creativity tests. One of the most widely used devices is the Torrance Tests of Creative Thinking (TTCT) (Rubenzer, 1979, p. 309).

Of course, no one scale or instrument will give a complete picture of a child's ability. The current pattern for identification purposes is to not rely exclusively on any one approach but to use a combination of them (Gallagher, 1975, p. 17). While it isn't expected that a single instrument will determine an individual's total creative ability, it is nevertheless important to derive as much information as possible out of those instruments that are used.

It is not uncommon to give additional credit for responses that depart from the commonplace and established when scoring the TTCT. For example, when scoring Activity 3 on the Figural Form, bonus originality points are given when subjects combine two or more sets of parallel lines or circles to make a single response.

This procedure is used to recognize that such responses indicate a rather high level of originality. The rationale used is that such responses are relatively rare and represent a departure from the commonplace and established (Torrance, 1966, p. 34).

The instructions outlined for the TTCT, Figural Test A, Activity II, are clear and read as follows:

> By adding lines to the incomplete figures on this and the next page, you can sketch some interesting objects or pictures. Again, try to think of some picture or object that no one else will think of. Try to make it tell as complete and as interesting a story as you can by adding to and building up your first idea. Make up an interesting title for each of your drawings and write it at the bottom of each block next to the number of the figure. All right, go ahead! You will have ten minutes (Torrance, 1966, p. 8).

While the instructions are not specific as to the order in which one should complete the figures, the figures themselves are numbered from one to ten in a left-to-right sequence which would lead one to proceed in that manner. As this is the direction in which we read, it is quite possible that one would naturally complete the figures in that order anyway. The senior author has given over a thousand of these tests and finds through his observation that the examinee generally completes the figures in the order expected.

Frank Williams (1970) defines risk taking as one's courage to:

> expose oneself to failure or criticisms
> take a guess
> function under conditions devoid of structure
> defend one's own ideas (p. iii).

It appears that one who completes the figures out of the expected order is very likely taking a risk, in that he/she has deviated from what is expected, exposes himself/herself...takes a guess and

generally completes the exercise his/her own way.

This study, therefore, attempts to examine the correlation between one's degree of discrepancy from expected order on the TTCT, Figural A, Activity II (TTCT/DS) and the risk-taking rating on a checklist designed to identify creative and academic talent for the gifted program of the Downingtown Area School District, Downingtown, Pennsylvania (DEEP). The checklist was developed by the personnel of the district for the gifted program. It culminated a review of several checklists used by other districts and those recommended by authorities in the area.

The DEEP form includes four rating scales for creativity, one of which is labeled "Risk Taking". The teacher considers five possibilities in checking this area:

1) does not like to tackle a new problem
2) has difficulty comprehending new procedures
3) applies general classroom methods satisfactorily
4) enjoys trying a new approach
5) finds many ways to solve problems independently; willing to risk failure

The student's score on the rating scale becomes the specified rating. The specific rating in each area is added together to get a total score.

Method

In this study, 47 fourth and fifth grade students identified for the gifted and talented program in the Downingtown Area School District completed the TTCT, Figural Form A, Activity II. Also

available for each student were the results of the classroom teachers' evaluations in creativity on the DEEP checklist. Only the score derived from the rating on risk taking was used for this study.

When students were administered the TTCT, Figural Form A, Activity II: Product Completion, the test administrator and one other person observed and recorded the order in which students completed the ten pictures presented in the activity.

For this study, the numerical order in which the items appear is considered the expected order of completion. A score was calculated for each subject consisting of the extent or degree of discrepancy from order for each figure completed. For example, if a subject completed number eight first instead of number one as expected, he/she was given a score of seven for that item. This signified the number of steps removed from the expected order. Individual discrepancies were then added to calculate the total TTCT/DS score.

Results

The comparison of the DEEP with the TTCT/DS scores yielded a significant pearson correlation coefficient, $r = .27$, df 45, $p = .04$ using a one-tailed test.

Discussion

The hypothesis that there is a positive relationship between an individual's score derived from the TTCT/DS and the risk-taking score from the DEEP checklist was supported. Considering these findings, it seems reasonable to conclude that further investigation

is in order and might include comparing the TTCT/DS with ratings on other checklists; or with standardized measures of creativity, specifically those measuring risk taking.

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